As a general rule, banks will use the lowest cost alterna
be it from the interest foregone when selling treasury bill
the interest that must be paid to borrow in the federal fu
market or at the discount window. The Fed prefers to
money to member banks for only brief periods of time
a last resort. It seriously frowns on banks which bor
continuously or do so out of a pure profit motive. The po
lar view held by market analysts is that the Fed uses the
count rate to control market rates of interest, and the
change in the discount rate is therefore a key leading indica
of monetary trends. In fact, the relationship is quite
reverse. As the Federal Reserve System seeks to discour
banks from using the discount window, it normally sets
discount rate at a level which is in line with, and preferably
bit higher than, the alternative treasury bill and federal fun
rates.

In other words, the discount rate is a follower of mark
interest rates, not a leader.

If the discount rate serves as anything but a passive instru
ment of Federal Reserve policy, it is probably only throu
its minor announcement effects. Occasionally the discou
rate may be changed as a signal to banks that the Feder
Reserve System is easing or tightening monetary policy
other areas.

Nonetheless, the stock market has traditionally viewe
discount rate changes as harbingers of future monetary policy
not as the passive elements they generally are. In fact, stock
prices do tend to rise following reductions in the discount rate
and do tend to fall after discount rate increases. This
phenomenon simply reflects concomitantly changing market
interest rates.

For the record, the empirically observed relationship
between discount rate changes and the stock market show
that during the three month period immediately following a
decrease in the discount rate, stock prices have tended to rise
at the well above average rate of about 7% (1% to 2% per
quarter is the long term norm). In the following three quar-
ters the rate of gain has been a bit lower, about 3% to 4% per

quarter, but still above average.

In the twelve months following increases in the discount rate, the stock market has also risen, but at a below average rate of less than 1% per quarter. Hence, a discount rate increase tends to act as a depressant on stock prices but not as an actual negative force. Or, more precisely, discount rate increases tend to mirror increases in market rates of interest which are the actual depressants on stock prices. Since it is always preferable to select the most direct indicator available, discount rate changes must defer to other interest rates as superior monetary forecasters of future stock market behavior.

9 Margin Requirements

The margin requirement is the minimum down payment required on purchases (or short sales) of stock.

By virtue of its authority to regulate the margin requirement, the Federal Reserve System is capable of enticing or discouraging the flow of speculative capital into the stock market. According to theory, the monetary authorities are thereby able to stabilize stock prices, preventing speculative extremes in both directions.

The Fed was first empowered to control the rate in 1934. Since then the margin rate has been as low as 40% and as high as 100%. It was fixed at 50% from January 3, 1974, into the 1980s. Despite the long time lapse since that last adjustment, the market's responses to margin changes is so significant that all investors should be aware of the historical record.

Margin Requirement Increases. Since the 1930s the Federal Reserve System has exercised its power to increase the minimum margin requirement twelve times. Requirement increases force speculators to put up more of their own

capital to buy stock, thereby reducing both lever... potential rewards. In theory, this should discour... stock purchase commitments. In addition, the greate... capital requirements reduce the total number of sh... stock which can be purchased. The resulting reduct... total market demand should cause downward pres... stock prices. Table 11 indicates that the market's ... response to the bearish Federal Reserve action has tra... ally been appropriately negative. But then, in a trend-... site to the theoretical expectation, the market has u...

TABLE 11

MARGIN REQUIREMENT INCREASES
AND MARKET PERFORMANCE

Time Period	S&P 500 Index Percent Change	Time Period	S&P 500 In... Percent Ch...
1 Day:	– 0.5%	1 Month:	+ 1.1%
2 Days:	– 0.4%	3 Months:	+ 4.9%
3 Days:	– 0.2%	6 Months:	+ 8.3%
4 Days:	– 0.3%	9 Months:	+ 10.8%
5 Days:	– 0.4%	12 Months:	+ 14.4%
10 Days:	– 0.3%	15 Months:	+ 10.2%
15 Days:	+ 0.3%	18 Months:	+ 10.6%

recovered its lost ground. By the end of one month it ... moved up 1%, an above normal rate of gain. The market ... generally continued to rise at an above average rate for ... full year following a margin increase. Not until more tha... year after the initial action has the market generally sta... to decline.

Of course, individual market cycles have deviated from t... average. For example, the margin rate was increased ... November 24, 1972, just prior to the great market collapse ... 1973-1974. A margin increase on February 21, 1946, al... immediately preceded a sharply downward market. (T... 1946 event can probably be dismissed as a one-time aber... tion since the Fed jacked the requirement up to the th...

unprecedented extreme of 100%, effectively prohibiting all margin activity.) All of the remaining ten margin requirement increases have occurred well before the market topped out – indeed, too early to have been of any help at all in timing market peaks.

It is also worth noting that the market has virtually always advanced vigorously in the months just prior to a margin increase; in fact, significantly so. In the immediately preceding six months, prices have advanced 15% on the average, while the full one year gain before the Fed has taken action has averaged 27%. That rate of excessive price growth is normally just what the Fed desires to temper when it injects a margin increase into the market atmosphere.

Margin Requirement Decreases. The margin rate has been lowered ten times since 1937. The Federal Reserve System has invariably made these reductions following protracted declines in the market. The lowering of margins has sometimes been instituted prior to a significant trough in prices, while on other occasions reductions have occurred somewhat after the market has formed a trough. On balance, though, margin requirement reductions have been a slightly leading indicator of market bottoms. Table 12 details the historical experience of market prices following the ten margin decreases.

TABLE 12

MARGIN REQUIREMENT DECREASES
AND MARKET PERFORMANCE

Time Period	S&P 500 Index Percent Change	Time Period	S&P 500 Index Percent Change
1 Day:	– 0.3%	1 Month:	+ 0.3%
2 Days:	– 0.5%	3 Months:	– 2.3%
3 Days:	– 1.0%	6 Months:	+ 3.4%
4 Days:	– 1.8%	9 Months:	+ 7.7%
5 Days:	– 1.9%	12 Months:	+ 12.5%
10 Days:	– 0.4%	15 Months:	+ 16.3%
15 Days:	– 0.6%	18 Months:	+ 18.5%

Contrary to theory, the market has declined slightly average in the days and weeks immediately following margin cuts, a reflection of the slightly leading tendency the indicator. After a couple of months, prices have usu initiated a strong uptrend and have continued to rise at above average rate for more than a year.

Indeed, only the most recent margin reduction on Janu 3, 1974, can be judged an absolute failure in predicting market upturn. By that date the broad market had been in downward trend for 21 months. The Federal Reserve Syst presumably acted in the hope of stemming what had alre been a sharp bear market collapse. Stock prices defied tra tion and continued to trend lower for most of the balance 1974. In retrospect, the speculative excesses which built prior to the 1972-1974 bear market can be seen to have be so great that a very lengthy and substantial price decline w necessary to correct them.

If it is acknowledged that the last crash was a uniq event, it is likely that in the future the purchase of stoc following a margin reduction should once again prove t constitute a profitable investment strategy.

10 Three Steps And A Stumble

The "Three Steps And A Stumble" rule states that whe the Federal Reserve System tightens monetary policy b increasing one of its basic policy variables (Discount Rat Margin Requirement, or Reserve Requirement) three times i succession, the market should "stumble" and fall down. Th rule implies that a minimum of three restrictive changes in single variable are required to knock the market down.

The "Three Steps And A Stumble" rule has been triggered just twelve times since the first signal in 1919. The signa dates, along with an analysis of their leads and lags of marke

peaks, are noted in Table 13. The third signal was triggered by three reserve requirement increases and the fourth by three margin boosts. All the rest are products of three successive discount rate increases. Signals have led market turns more frequently than lagged them.

TABLE 13

"THREE STEPS AND A STUMBLE" SIGNALS (1914-1983)

Signal	Date of Signal	S&P 500 Peak	Lead or Lag
1	Nov. 3, 1919	Nov. 3, 1919	Coincident
2	July 13, 1928	Sep. 7, 1929	14 Month Lead
3	May 1, 1937	Mar. 6, 1937	2 Month Lag
4	Jan. 21, 1946	May 29, 1946	4 Month Lead
5	Aug. 13, 1948	June 15, 1948	2 Month Lag
6	Sep. 9, 1955	Aug. 2, 1956	11 Month Lead
7	Mar. 6, 1959	Aug. 3, 1959	5 Month Lead
8	Dec. 6, 1965	Feb. 9, 1966	2 Month Lead
9	Apr. 19, 1968	Nov. 29, 1968	7 Month Lead
10	May 4, 1973	Jan. 11, 1973	4 Month Lag
11	Oct. 26, 1977	Sep. 21, 1976	13 Month Lag
12	Nov. 14, 1980	Nov. 28, 1980	Coincident
		Median:	3 Month Lead

Table 14 shows a more explicit record of market action following the signal dates. The rule appears to have merit, although the direction of stock prices after the signals has not been uniformly downward, nor has the average extent of the

TABLE 14

"THREE STEPS AND A STUMBLE" & MARKET PERFORMANCE

Time Period	S&P 500 Index Percent Change	Number of Times Market Advanced
5 Days:	+ 0.4%	3 out of 12
10 Days:	− 0.1%	3 out of 12
15 Days:	− 0.4%	6 out of 12
20 Days:	−1.4%	5 out of 12
3 Months:	− 0.3%	6 out of 12
6 Months:	− 1.1%	6 out of 12
9 Months:	− 5.2%	7 out of 12
12 Months:	− 5.0%	8 out of 12
15 Months:	−4.0%	7 out of 12
18 Months:	− 6.5%	6 out of 12

declines been especially severe. A "Three Steps And A Stumble" signal tends to act as a depressant to stock prices. Eventually all sell signals have led to substantial price declines – about 30% on average, although in some cases a long delay has ensued before the decline has materialized. (In 1928, a 12 month, 70% rise in prices followed the sell signal before the market declined. By then the Fed was already assuming a contrary stance of monetary ease.)

The long run significance of "Three Steps And A Stumble" sell signals may be alternatively illustrated by assuming a hypothetical investment policy of shorting stocks during the twelve months following each of the ten initiations of the bearish rule. Based on the performance of the Standard & Poor's Composite Index, the simulation produces a total portfolio growth from $10,000 to $13,486 over the cumulative twelve year holding period. That equates to an annual rate of return of 2.5%. While the net return would be trivial after adjustment for trading costs, the fact that a short selling strategy would result in any paper profits at all, suggests anew that periods following "Three Steps And A Stumble" signals would be good ones to temporarily step out of stocks and into riskless money market investments.

The weakness of the "Three Steps And A Stumble" rule lies in its highly variable prediction lead time. The Fed begins taking restrictive action well before the economic and stock market booms near completion. Indeed, the rule's requirement of three steps rather than just a single step up in any one of the key rates is a concession to this fact – but only a compromise. It is apparent that occasionally a rule of four or five (or only two) steps up in one of the rates would improve the lead or lag time and furnish superior sell signals, although the specific occasions on which the adjustments should be applied are not determinable in advance. In sum, "Three Steps" signals constitute a warning that the market is basically overpriced, even though the serious investor must look elsewhere for more precise timing indicators of market tops.

11 Two Tumbles And A Jump

The "Two Tumbles And A Jump" rule states that when the Federal Reserve eases the monetary climate by decreasing one of the three basic policy variables (Discount Rate, Margin Requirement, or Reserve Requirement) *two* times in succession, conditions are favorable for an ensuing "jump" in stock prices. It was first proclaimed by the author in 1973.

The rule was then next triggered on January 9, 1975, following the Fed's second consecutive cut in the discount rate. The market shot upward from that point, with the S&P 500 Index increasing 32% after one year and reaching a peak interim gain of 34%. Though impressive, as noted in Table 15, it was only an average "Two Tumbles And A Jump" performance.

TABLE 15

"TWO TUMBLES AND A JUMP" SIGNALS (1914-1983)

Signal No.	Date of Signal	S&P 500 Index Maximum % Gain Within One Year	S&P 500 Index Maximum % Loss Within One Year
1	Dec. 23, 1914	+ 82%	0%
2	June 16, 1921	+ 41%	– 6%
3	June 12, 1924	+ 42%	0%
4	Nov. 15, 1929	+ 28%	– 23%
5	June 24, 1932	+ 137%	– 4%
6	May 26, 1933	+ 31%	– 8%
7	Sep. 14, 1942	+ 48%	0%
8	Mar. 30, 1949	+ 16%	– 11%
9	Apr. 16, 1954	+ 36%	– 1%
10	Jan. 24, 1958	+ 34%	– 3%
11	Aug. 12, 1960	+ 20%	– 7%
12	July 10, 1962	+ 24%	– 6%
13	Dec. 4, 1970	+ 17%	0%
14	Dec. 6, 1971	+ 22%	0%
15	Jan. 9, 1975	+ 34%	– 1%
16	June 12, 1980	+ 22%	– 1%
17	Dec. 3, 1981	+ 11%	– 18%
	Median . . .	+ 31%	– 3%